REMARKS

Specification

The Examiner contends that this application does not contain an abstract of the disclosure. Applicant hereby submits on a separate sheet an abstract in accordance to 37 C.F.R. 1.72(b).

Applicant has also amended the specification to capitalize the trademarks recited in the specification.

Rejections Under 35 USC §112, 1st Paragraph

Claims 1-3 are rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. The rejection is respectfully traversed.

The Examiner rejects the claims for reciting a method of using anti-HER-2/neu antibody to treat uterine serous papillary carcinoma regardless of (i) the specificity of the anti-HER-2/neu antibody, (ii) whether the antibody is monoclonal or polyclonal, (iii) whether the antibody is humanized, and (iv) the extent of HER-2/neu expression on the tumor.

Claim 1 has been amended to recite a method of using a humanized anti-HER-2/neu antibody that binds to the p185

extracellular domain of HER-2/neu to treat uterine serous papillary carcinoma that over-express HER-2/neu. The biological effects of one of such anti-HER-2/neu antibody, the humanized HERCEPTIN® antibody, were disclosed in the specification. It was shown that the proliferation of uterine serous papillary carcinoma cells was significantly inhibited by the HERCEPTIN® antibody, and the tumor cells were highly sensitivity to HERCEPTIN®-mediated antibody dependent cellular cytotoxicity. Hence, Applicant submits that there are clear example and data demonstrating and supporting the uses of humanized anti-HER-2/neu antibody that binds to the p185 extracellular domain of HER-2/neu. The specification has provided sufficient enablement commensurate to the scope of the claimed method. Accordingly, Applicant respectfully requests that the rejection of claims 1-3 under 35 U.S.C. §112, first paragraph, be withdrawn.

Rejections Under 35 USC §112, 2nd Paragraph

Claims 4-5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The rejection is respectfully traversed.

Claim 4 is rejected for reciting a trademark which cannot be used properly to identify a particular product. Claim 4 has been canceled. Accordingly, Applicant respectfully requests that the rejection of claims 4-5 under 35 U.S.C. §112, second paragraph, be withdrawn.

Rejections Under 35 USC §103

Claims 1-5 are rejected under 35 USC §103 as being unpatentable over **Baselga** et al. (1996) in view of **Agus** et al. (2000), **Saffari** et al. (1995), **Berchuck** et al. (1991), **Wang** et al. (1993) and **Pegram** et al. (1998). This rejection is respectfully traversed.

The Examiner has not provided copies of **Baselga** et al., **Agus** et al., **Saffari** et al., **Wang** et al. and **Pegram** et al. in the office action. According to the Examiner, **Baselga** et al. teach the use of anti-HER-2/neu antibody HERCEPTIN® to treat HER-2-overexpressing metastatic breast cancer. The Examiner acknowledges that **Baselga** et al. do not teach treating uterine serous papillary carcinoma with HERCEPTIN®.

The Examiner argues that (1) **Agus** et al. teach that HER-2/neu is overexpressed in most epithelial malignancies; (2) **Berchuck** et al. teach that 25% of uterine serous papillary carcinoma assayed overexpress HER-2/neu; (3) **Saffari** et al. teach that 33% of uterine serous papillary carcinoma assayed overexpress HER-2/neu; (4) **Wang** et al. teach that 100% of uterine serous papillary carcinoma assayed overexpress HER-2/neu; and (5) **Pegram** et al. teach that HERCEPTIN® is known to have antiproliferative activity against HER-2/neu-overexpressing breast carcinoma cells. The Examiner concludes that it would have been *prima facie* obvious at the time the invention was made to treat HER-2/neu-overexpressing uterine serous papillary carcinoma with HERCEPTIN® because HERCEPTIN® was found to have additive and synergistic effects with some chemotherapeutic agents in preclinical studies and clinical trials of HERCEPTIN® for the treatment of lung, prostate and ovarian cancer are currently underway.

Applicant submits that even though one of ordinary skill in the art may find it "obvious to try" treating uterine serous papillary carcinoma with HERCEPTIN®, the cited references do not provide one of skill in the art with the requisite expectation of successfully producing Applicant's claimed method. The Examiner

contends that "there is clearly an expectation of success or the long and expensive process of clinical trials would never have been started." Applicant respectfully disagrees.

Applicant submits that the requirement and results of clinical trials instead highlight the need for empirical experimentation on therapeutic treatment for a particular cancer. Results from the largest study published to date evaluating the expression of HER-2/neu in ovarian cancer as well as the efficacy of HERCEPTIN® for the treatment of ovarian cancer indicate that treatment with HERCEPTIN® is not effective for ovarian cancer (Bookman et al. (2003), Evaluation of monoclonal humanized anti-HER2 antibody in patients with recurrent or refractory ovarian or primary peritoneal carcinoma with overexpression of HER2: a phase II trial of the Gynecologic Oncology Group. *J. Clinical Oncology* 21:283). Therefore, not every HER-2/neu-overexpressing cancer is susceptible to treatment with HERCEPTIN®. The effects of HERCEPTIN® on a particular type of cancer cells (e.g. uterine serous papillary carcinoma in the instant application) have to be determined by empirical experimentation as disclosed in the present invention.

In view of the above remarks, applicant submits that the invention as a whole is not *prima facie* obvious to one of ordinary

skill in the art at the time the invention was made. Accordingly, Applicant respectfully requests that the rejection of claims 1-5 under 35 U.S.C. §103 be withdrawn.

This is intended to be a complete response to the Office Action mailed November 5, 2003. If any issues remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution.

Respectfully submitted,

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